

Our Docket No: 005493.P001

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Malcolm J. Simons

Application No.: 09/935,998

Filed: August 23, 2001

For: Intron Sequence Analysis Method  
For Detection of Adjacent and  
Remote Locus Alleles as Haplotypes

Examiner: Not yet assigned

Art Unit: 1655

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FIRST CLASS CERTIFICATE OF MAILING

I hereby certify that I am causing the above-referenced correspondence to be deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and that this paper or fee has been addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit: April 25, 2003

Name of Person Mailing Correspondence: Lori E. True

Lori E. True

Signature

April 25, 2003

Date

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form PTO-1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form PTO-1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

**The Information Disclosure Statement is being filed:**

- ☒ (a) within three months of the filing date of the patent application, (b) within three months of the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 of the international application, or (c) before the mailing date of a first Office Action on the merits, or (d) before the mailing date of a First Office Action after the filing of a request for continued examination under § 1.114.
- ☐ **after** (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, and includes:
- ☐ the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below).
- ☐ the fee of \$180 set forth in 37 C.F.R. § 1.17(p) (see "Fees" below).
- ☐ **after** the mailing date of a final action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, and includes the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below), a Petition requesting consideration of the Information Disclosure Statement (see "Petition" below), and the Petition Fee set forth in 37 C.F.R. § 1.17(i) (see "Fees" below).

**Copies Of The References**

- ☒ Copies of certain references listed on the enclosed Form PTO-1449 are enclosed herewith. Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 C.F.R. § 1.98(a)(3).
- ☐ A copy of the foreign search report is enclosed herewith.
- ☒ Some of the references listed on the enclosed Form PTO-1449 were previously identified in the parent application of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 C.F.R. § 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 U.S.C. § 120 in which copies of the references were previously furnished are set out below:

U.S. APPLICATIONS		Status ( <i>check one</i> )		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
08/682,054	July 16, 1996	X		

## Other Applications

- ☐ The Examiner's attention is directed to the following U.S. patent application(s):

U.S. APPLICATIONS		Status ( <i>check one</i> )		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED

## Certification

- ☐ The **undersigned attorney** hereby certifies that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
- ☐ The **undersigned attorney** hereby certifies that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application or, to the knowledge of the attorney signing after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

## Petition

- ☐ The undersigned attorney hereby petitions the Commissioner to consider this Information Disclosure Statement and the references listed on the enclosed Form PTO-1449 in the examination of the above-identified patent application.

## Fees

- ☒ **No fee** is owed by the applicant(s).
- ☐ The **IDS Fee of \$180.00** under 37 C.F.R. § 1.17(p) is enclosed herewith.
- ☐ The **Petition Fee of \$130.00** set forth in 37 C.F.R. § 1.17(i) is enclosed herewith.

## Method Of Payment Of Fees

- ☐ Attached is a check in the amount of \$ 180.00
- ☐ Charge Deposit Account No. 02-2666 in the amount of \$. (A duplicate copy of this communication is enclosed for that purpose.)

## Authorization To Charge Additional Fees

- ☒ If any additional fees are owed in connection with this communication, please charge Deposit Account No. 02-2666. (A duplicate copy of this communication is enclosed for that purpose.)

**Instructions As To Overpayment**

☒ Credit Account No. 02-2666.  
☐ Refund

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: April 25, 2003



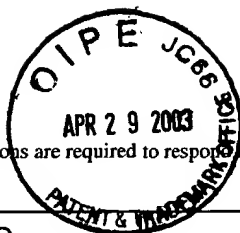
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Substitute for form 1449A/PTO (modified) <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if known</b>		
				Applicati n Numb r	09/935,998	<b>RECEIVED</b>
				Filing Date	August 23, 2001	
				First Named Inventor	Malcolm J. Simons	<b>MAY 01 2003</b>
				Group Art Unit	1655	
				Examiner Name	Not yet assigned	<b>TECH CENTER 1650/2900</b>
Attorney Docket Number	005493.P001					
Sheet	1	of	3			

US Patent Documents						
Examiner's Initials	Date	Document Number	Name	Class	Sub- Class	Filing Date
	09/20/1988	4,772,549	Frossard			
	12/24/1991	5,075,217	Weber			
Foreign Patent Documents						
Examiner's Initials	Date	Document Number	Country	Class	Sub- Class	Translation
	12/12/1989	36908/89	Australia			
	05/31/1990	45565/89	Australia			
	08/20/1990	EPA 0414469				

Other Prior Art - Non Patent Literature Documents			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		AKERMAN, et al., "Identification of Deletion and Triple $\alpha$ -Globin Gene Haplotypes in the Montreal $\beta$ -Thalassemia Screening Program: Implications for Genetic Medicine," <i>Am. J. Med. Genet.</i> , 36:76-84 (1990).	
		GÖTZE, et al., "The Major Histocompatibility Complex", <i>Fundamentals of Immunology</i> , Springer Verlag, 1981 (ed. Bier, da Silva, Götze, Mota)	
		BOERWINKLE, et al., "Rapid Typing of Tandemly Repeated Hypervariable Loci by the Polymerase Chain Reaction: Application to the Apolipoprotein B 3' Hypervariable Region," <i>Proc. Natl. Acad. Sci. USA.</i> , Vol. 86, pp. 212-216. January 1989.	
Examiner Signature			Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet	2	of	3			

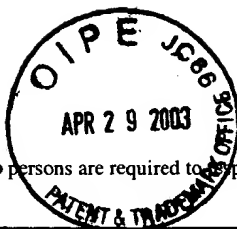
**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	•	FRIES, et al., "The Bovine Genome Contains Polymorphic Microsatellites," <i>Genomics</i> , October 1990; 8(2):403-6.	
	•	HONIG, et al., "Human Hemoglobin Genetics," 1986, Springer-Verlag, pp. 227-249.	
	•	IWAHANA, et al., "A New RFLP in Intron 1 of the Human c-Ha-ras1 Gene and Its Close Relationship with the Variable Tandem Repeats in the Region 3' to the Gene," <i>Oncogene</i> , 5:1049-53, 1990.	
	•	LIEBHABER, et al., "Compensatory Increase in $\alpha$ 1-Globin Gene Expression in Individuals Heterozygous for the $\alpha$ -Thalassemia-2 Deletion," <i>J. Clin. Invest.</i> , Sept. 1985 76(3): 1057-1064	
	•	MYEROWITZ, "Splice Junction Mutation in Some Ashkenazi Jews with Tay-Sachs Disease: Evidence Against a Single Defect Within this Ethnic Group," <i>Proc. Natl. Acad. Sci. USA</i> , June 1988 85(11): 3955-59.	
	•	ORKIN, et al. "The Mutation and Polymorphism of the Human Beta-Globin Gene and its Surrounding DNA," <i>Ann. Rev. Genet.</i> 1984; 18:131-71.	
	•	PAUL, et al, "DNA Polymorphic Patterns and Haplotype Arrangements of the apo A-1, apo C-III, apo A-IV Gene Cluster in Different Ethnic Groups," <i>Hum Genet</i> (1987) 75: 264-268.	
	•	RICKETTS, et al, "Defective Splicing of Thyroglobulin Gene Transcripts in the Congenital Goitre of the Afrikaner Cattle," <i>The EMBO Journal</i> , Vol. 4, No. 3, pp. 731-737, 1985.	
	•	SKOLNICK, et al, "Simultaneous Analysis of Multiple Polymorphic Loci Using Amplified Sequence Polymorphisms (ASPs) <sup>1</sup> ," <i>Genomics</i> , 2, 273-279 (1988).	
	•	WHITE, et al, "The Polymerase Chain Reaction," <i>TIG</i> , June 1989, Vol. 5, No. 6. pp. 185-189.	
	•	Certified Translation of Inoko (1989), "DNA Typing of HLA Antigen," <i>Nihon Rinsho</i> , 47, 550-576.	

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Sheet	3	of	3			

### Other Prior Art - Non Patent Literature Documents

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		ABRAHAM, et al., "Sequence Differences Between HLA-B and TNF Distinguish Different MHC Ancestral Haplotypes," <i>Antigens</i> , 39(3): 117-121 (March 1992).	
		BROOKS, et al., "Association of the Widespread A149P Hereditary Fructose Intolerance Mutation with Newly Identified Sequence Polymorphisms in the Aldolase B Gene," <i>Am. J. of Hum. Genet.</i> , 52: 835-840 (1993).	
		EISSES, et al., "Analysis of the Gene Encoding the Multifunctional Alcohol Dehydrogenase Allozyme ADH-71k of <i>Drosophila Melanogaster</i> ," <i>Mol. Biol. Evol.</i> , 7:459-469 (1990).	
		MESSER, et al., "Polymorphic Structure of the Tumor Necrosis Factor (TNF) Locus: An NcoI Polymorphism in the First Intron of the Human TNF- $\alpha$ Gene Corrolates with a Variant Amino Acid in Position 26 and a Reduced Level of TNF- $\alpha$ Production," <i>J. Exp. Med.</i> , 173: 209-219 (1991).	
		<i>Molecular Biology of the Cell</i> , Second Edition, New York, 1989, Chapter 9: "RNA Synthesis and RNA Processing," pp. 531-535 and Chapter 10: "Control of Gene Expression," pp. 602-604.	
		SCHLIEBEN, et al., "Genotyping of Bovine Kappa-Casein (Kappa-CAN, Kappa-CNB, Kappa-CNC, Kappa-CNE) Following DNA Sequence Amplification and Direct Sequencing of Kappa-CNE PCR Product," <i>Anim. Genet.</i> 1991; 22(4):333-42.	
		SIMONS, et al., "Restriction Fragment Length Polymorphism of HLA Genes: Summary of the Tenth International Workshop Southern Blot Analysis," <i>Immunology of HLA</i> , 1:959-1023 (1989).	

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